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10/582,392	06/28/2007	Thomas N. Horsky	211843-00044	3848

27160 7590 03/10/2009  
KATTEN MUCHIN ROSENMAN LLP  
(C/O PATENT ADMINISTRATOR)  
2900 K STREET NW, SUITE 200  
WASHINGTON, DC 20007-5118

EXAMINER
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SOUW, BERNARDE

ART UNIT	PAPER NUMBER
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2881

MAIL DATE	DELIVERY MODE
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03/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.





## **DETAILED ACTION**

### ***Petition Granted***

1. The petition filed by Applicant on 10/07/2008 under §1.137 (b) has been granted on 01/23/2009.

Consequently, the prosecution of this application is continued.

### ***Information Disclosure Statement***

2. Receipt is acknowledged of information disclosure statement (IDS) submitted on 10/21/2008, 04/22/2008, 12/12/2008 and 03/20/2008. The submission is in compliance with the provisions of 37 CFR 1.97.

Signed copies of the information disclosure statements are here enclosed.

### ***Amendment***

3. The Amendment filed on 10/07/2008 has been entered. The present Office Action is made with all the suggested amendments being fully considered.

Claims 2-69 have been previously cancelled.

No new claim has been added.

Claims 1 and 70-137 are pending in this Office Action.

### ***Terminal Disclaimer***

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4. The terminal disclaimers filed on 10/07/2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration dates of US Patent Application No.11/647,898 and 11/647,719 have been reviewed and are accepted. The terminal disclaimers have been recorded.

### **Double Patenting**

#### ***Provisional Double Patenting Withdrawn***

5. An obviousness-type provisional Double Patenting rejection of claim 1 and claim 102 over claim 1 of copending Application No. 11/647,898 (USPGPub 2007/0241689) is now withdrawn based on the Terminal Disclaimer filed 12/22/2008.

6. Another obviousness-type provisional Double Patenting rejection of claim 130 over claim 1 of copending Application No. 11/647,719 (USPGPub 7/0108395) is now withdrawn based on the Terminal Disclaimer filed 12/22/2008.

#### ***Non-Statutory Type Double Patenting Required***

7. Claims 1 and 102 **stand** rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent **Application No. 11/647,714** (USPGPub 2008/0121811). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claim is an obvious variation of the reference claim:

► The ion source and its accessories are the same as those of the reference application.

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- ▶ The extraction electrode is also the same as that of the reference application.
- ▶ The reactive gas cleaning system is also the same as that of the reference application.
- ▶ The additional limitation in the present claim regarding the surface of the ion source being susceptible to contamination deposits is not a true limitation, but only a “dummy” limitation that represents a general condition well known in the art that does not further limit the claim, since, if the surface of the ion source is not susceptible to contamination, there would be no contamination and no cleaning needed, so the claim would not make any sense and/or the entire claim would cease to exist.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 130 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent Application No. 11/452,003 (USPGPub 2006/027). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claim is an obvious variation of the reference claim:

- ▶ The extraction electrode is the same as that of the reference application.
- ▶ The limitations regarding its temperature are also the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Indication of Allowable Subject Matter***

9. Claims 1 and 102 would be allowable upon submitting a Terminal Disclaimer over US Applications SN 11/647,714.
10. Claim 130 would be allowable upon submitting a Terminal Disclaimer over US Applications SN 11/452,003.
11. Claims 70-101, 103-129 and 131-137 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reasons for Allowable Subject Matter***

12. The following is an examiner's statement of reasons for allowable subject matter:

Claims 1 and 102 contain allowable subject matter for reciting a system for generating an ion beam comprising an ion source in combination with an extraction electrode and a reactive gas cleaning system, the ion source comprising an ionization chamber maintained at a high voltage and having an inlet for gaseous or vaporized feed materials, an ionizing system for ionizing the feed material within the ionization chamber, and an extraction aperture that communicates with a vacuum housing that is evacuated by a vacuum pumping system, the extraction electrode disposed in the vacuum housing outside of the ionization chamber, aligned with the extraction aperture and adapted to be maintained at a voltage below that of the ionization chamber to extract ions through the aperture, and the reactive gas cleaning system operable when

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the ionization chamber and ionizing system are de-energized to provide a flow of reactive gas through the ionization chamber and through the ion extraction aperture to react with the deposits, and thus removing the deposits from at least some of the surfaces of the ion generating system.

13. Claim 130 contains allowable subject matter for reciting an ion implantation system comprising an ion source and an extraction electrode associated with an electrical heater that is adapted to keep the extraction electrode temperature elevated above the condensation temperature of gaseous or vaporous material leaving the ion source.

14. Claims 70-101, 103-129 and 131-137 also contain allowable subject matter due to their dependency, either directly or indirectly, to the previously allowable claim 1.

### ***Final Rejection***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and



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any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Communications***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw, whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571 272 2293. The central fax phone number for the organization where this application or proceeding is assigned is 571 273 8300 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 5993.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bernard E Souw/  
Examiner, Art Unit 2881

11/26/2008